

# Improvement Science Liaisons Addressing Nephropathy in diabetes and Hypotensive Disease

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## INTRODUCTION

#### **OVERVIEW/RESUMEN**

High quality care implementation in patients with Diabetes Mellitus (DM) with Chronic Kidney Disease (CKD) remains challenging in US and territories. Standardized healthcare delivery is needed in DM with CKD, especially with a higher age-adjusted prevalence of adults with diabetes in US territories, compared to the median for all US states. Medicare data in 2018 shows that amongst patients with DM:

only 80% were aware of their advanced CKD diagnosis,

50% of advanced CKD (Stage 4) remain undiagnosed in the primary care setting,

55% did not receive an albuminuria assessment recommendation,

Less than 10% of patients with hypertension (HTN), and,

Less than 40% of patients with DM are screened for albuminuria.

Timely diagnosis and effective control of HTN and DM is essential to prevention of CKD progression. Unrecognized CKD greatly impacts healthcare utilization and outcomes from early CKD, escalating costs exponentially through CKD stages.

#### PROJECT ECHO: I.S.L.A.N.D.-H.D



I mprovement L iaisons A ddressing N ephropathy in D iabetes & H ypertensive D iseases

LEARNING OBJECTIVES/ **OBJETIVOS DE APRENDIZAJE** 

Improve high value primary care using Prevention/Early Recognition/Management (PERM) in Chronic Kidney Disease (CKD)- Enfermedad renal crónica (Submit optional discussion cases).

Increase primary care providers' awareness of major risk factors off CKD and kidney failure: DM & HTN.

Increase use of evidence-based KDIGO Guidelines for CKD diagnosis, prevention and management.

Provide peer mentoring on systematic, data driven process improvements.

Create a community of primary care and expert tele-mentors with an "all learn, all teach" approach.

Enhance clinical decision support tools to improve identification of people with DM and CKD.

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Amplify risk factor reduction through patient activation, nutrition, education & social work support.

Kidney diseases are the leading cause of death in the United States with 37 million US Adults estimated to have CKD and most are undiagnosed. A web based tele-mentoring program series developed by NYU Langone-Long Island-LISOM was developed to improve clinical workforce capacity in Chronic Kidney Disease and Diabetes. The format utilized the Project EHCO (Extension for Community Healthcare Outcomes) format of All Teach-All Learn philosophy. Project ECHO enable specialists to partner with primary care clinicians in underserved areas. The goal was to start with one island center and create a hub. The group started with Puerto Rico and a community health center. Local PMD also participated. The faculty was a multidiscipline and specialist group. It not only focused on the clinical education but also included the challenge of social concerns to achieve intervention.

The program was divided into web based monthly sessions over a six month period. Each month was a ninety-minute clinical didactic followed by education on Quality Improvement skills. The following week would be a sixty-minute interactive session to discuss a case scenario followed by assistance with development of the QI Essential Toolkit Driver Diagram regarding prevention/treatment of CKD.

participating discipline.

#### **Core Didactic**

Why is CKD Problematic? **Primary Care ECHO Discussion, Case Stu Empowering Patients in Chronic Disease managem** Social Determinants of He **ECHO Discussion, Case Stu** Pharmacological Manager of Diabetes and CKD **ECHO Discussion, Case Stu Challenges with CKD Prevention and Managem ECHO Discussion, Case Stu Team Based Care Community Based Organizations in CKD ECHO Discussion, Case Stu** 

Results from the PMD programs showed development of a QI program that included methods starting with information gathering utilizing their computer system in order to identify patients at risk. The starting point for most participants was collection of baseline data regarding patients' creatinine, albuminuria, and eGFR levels to identify individuals that intervention should be considered or timeframe for follow up. All participants showed improvement in their set goals over the six-month period with some achieving their goals. All centers are

developing continued QI drivers to build on their programs.

## **Project ECHO: I.S.L.A.N.D-H.D**

### **METHODOLOGY**

All lectures, discussions, and case scenarios were recorded so that they could be used in the future. Continuing education credits were developed for each

|               | QI Pearls                                            | Qi Milestones                        |
|---------------|------------------------------------------------------|--------------------------------------|
|               | The Need for Change and the<br>Guiding Coalition     | Engage Leadership Charter QI<br>Team |
| udies         |                                                      |                                      |
| nent<br>ealth | Understanding Current Reality<br>Planning for Change | Problem Statement<br>Baseline Data   |
| udies         | DDCA. Testing Changes Island                         | Kasa Driver Die energy               |
| ment          | PDSA: Testing Change Ideas                           | Key Driver Diagram                   |
| udies         |                                                      |                                      |
| nent          | Understanding Variations: QI<br>Data                 | PDSA Worksheet                       |
| udies         |                                                      |                                      |
|               | When to Call the Specialist                          | QI DATA                              |
| udies         |                                                      |                                      |
|               | Share results, graduation, follow up plans.          |                                      |

A bond was formed over the six-month period between participants and faculty. The group in Puerto Rico is considering becoming a hub and the program will be offered again in Puerto Rico to other PMD and Community Health Centers. The goal is to continue sharing knowledge and to impact the continued threat of CKD and need for early intervention. An area that seemed to challenge everyone was to not only collect data but to assure it was entered/coded correctly. Programs have added an education tools such as ACE/ARB and when the medication should be started.

All participants showed a commitment to provide high quality care. It was also felt that individuals from the site working on the QI project should participate in the didactics. Discussion included recruitment issues for future spokes. It was also felt that on site visit by Long Island medical students would be beneficial. Discussion also included the value of onsite instruction by Long Island experts to teach Quality Improvement science. Discussion also included obtaining grants to assist with building on the changes that have occurred. **References** 

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## DISCUSSION

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## Acknowledgement

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